

STATEMENT OF BASIS (AI No. 9228)

for draft Louisiana Pollutant Discharge Elimination System permit No. LA0060763 to discharge to waters of the State of Louisiana.

THE APPLICANT IS: Zen-Noh Grain Corporation
Terminal Facility
8886 Highway 44
Convent, Louisiana 70723

ISSUING OFFICE: Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313

PREPARED BY: Michelle Bickham

DATE PREPARED: March 17, 2009

1. PERMIT STATUS**A. Reason For Permit Action:**

Permit reissuance of a Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term

B. NPDES permit – NPDES permit effective date: N/A
NPDES permit expiration date: N/A
EPA has not retained enforcement authority.

C. LPDES permits – LA0060763
LPDES permit effective date: April 1, 2004
LPDES permit expiration date: March 31, 2009

D. Date Application Received: October 1, 2008

2. FACILITY INFORMATION**A. FACILITY TYPE/ACTIVITY - export grain elevator**

Zen-Noh Grain Facility is an existing export grain elevator. The facility provides storage for and ships grains and woodchips. Grain stored and transferred at the facility includes corn, soybeans, milo, and a small amount of wheat. The woodchip handling system stores and transfers hardwood chips.

B. FEE RATE

1. Fee Rating Facility Type: minor
2. Complexity Type: I
3. Wastewater Type: II
4. SIC code: 5153, 5099, 4221

C. LOCATION - 8886 Highway 44, Convent, St. James Parish
Latitude 30° 04' 08", Longitude 90° 51' 53"

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3. OUTFALL INFORMATION

Outfall 002

Discharge Type: area washdown water and stormwater runoff
 Treatment: none
 Location: at the point of discharge from the ditch south of the tracks and north of the silos
 Flow: 115,000 gpd
 Discharge Route: local drainage thence to St. James Canal

Outfall 003

Discharge Type: area washdown water and stormwater runoff
 Treatment: none
 Location: at the point of discharge from the ditch northwest of the woodchip area
 Flow: 278,000 gpd
 Discharge Route: local drainage thence to St. James Canal

Outfall 103

Discharge Type: treated sanitary wastewater
 Treatment: Clow sewage treatment plant with chlorination
 Location: at the point of discharge from the sewage treatment plant
 Flow: 6,000 gpd
 Discharge Route: through Outfall 003 thence to local drainage thence to St. James Canal

4. RECEIVING WATERS

STREAM - local drainage thence to St. James Canal

BASIN AND SEGMENT - Lake Pontchartrain Basin, Segment 040403

DESIGNATED USES -

- a. primary contact recreation
- b. secondary contact recreation
- c. propagation of fish and wildlife
- g. outstanding natural resources **

**As per LAC33:IX.1111.A, this use designation shall apply only to listed water bodies and not to their tributaries or distributaries unless so specified. Furthermore, the effluent must flow through 2.59 miles through the St. James Canal, 1.11 miles of Maurepas Swamp and at least 11.22 miles of parish drainage prior to having the potential to reach Blind River.

5. TMDL STATUS

Subsegment 040403 is listed on LDEQ's Final 2006 303(d) List as impaired for nutrients, phosphorus, sedimentation/siltation, organic enrichment/low DO, mercury, non-native aquatic plants, and turbidity. To date no TMDL's have been completed for this subsegment. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by a TMDL. Until completion of TMDL's for the Lake Pontchartrain Basin, those suspected causes for impairment which are not directly attributed to the

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export grain elevator point source category have been eliminated in the formulation of effluent limitations and other requirements of this permit. Additionally, suspected causes of impairment which could be attributed to pollutants which were not determined to be discharged at a level which would cause or have the reasonable potential to cause or contribute to an excursion above any present state water quality standard were also eliminated. Therefore, for the purposes of this permit, organic enrichment/low DO, sedimentation/siltation, and turbidity will be addressed in a manner consistent with the Department's permitting guidance for implementing Louisiana's surface water quality standards as follows:

Organic enrichment/low DO, Nutrients

To protect against the further impairment of the organic enrichment/low DO impairment cause, TOC and BOD₅ limits will be placed in the permit. LDEQ's position, as stated in the declaratory ruling issued by Dale Givens regarding water quality criteria for nutrients (Sierra Club v. Givens, 710 So.2d 249 (La. App. 1st Cir. 1997), writ denied, 705 So.2d 1106 (La. 1998)), is that when oxygen demanding substances are controlled and limited in order to ensure that the dissolved oxygen criterion is supported, nutrients are also controlled and limited. LAC 33:IX.2707.C.f.iii allows the establishment of effluent limitations based on an indicator parameter for the pollutant of concern. LDEQ's consistent approach to controlling nutrients where the WQMP does not otherwise require specific nutrient limitations is achieved by limiting the discharge of oxygen-demanding substances through TOC and BOD₅ limitations. Compliance with the TOC and BOD₅ limitations as the indicator parameters will result in the control of nutrients from the discharge sufficient to attain and maintain the applicable water quality standard. Effluent monitoring of the indicator parameter as conducted by the permittee in accordance with the permit in addition to LDEQ's ambient water quality monitoring program will allow for further evaluation by the Department to determine the effectiveness of the limitation. The reopener clause located in the permit allows the Department to modify or revoke and reissue the permit if the limitations as set on the indicator parameter are shown to no longer attain and maintain applicable water quality standards.

Sedimentation/Siltation, Turbidity

To protect against the further impairment of the sedimentation/siltation and turbidity impairment causes, TSS limits will remain in the permit.

6. PROPOSED EFFLUENT LIMITS

BASIS - See Rationale below.

Changes from previous permit: The monitoring frequency for Outfall 002 has been changed from 1/quarter to once per two months.

7. COMPLIANCE HISTORY/COMMENTS

There have been no recent inspections at the facility. All DMR's have been submitted in accordance with the existing permit. The DMR's were reviewed for the period of 1/07-12/08, and the excursions are as follows:

Date	Parameter	Outfall	Reported Value	Permit Limits
6/08	TOC	002	97.2 mg/L	50 mg/L
12/07	TOC	002	70.2 mg/L	50 mg/L
12/07	TOC	003	55.3 mg/L	50 mg/L

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6/07	TOC	002	84.4 mg/L	50 mg/L
3/07	TSS	103	31 mg/L	30/45 mg/L

8. EXISTING EFFLUENT LIMITS

Outfalls 002 and 003 – area washdown water and stormwater runoff

Parameter	LPDES	
	Monthly Average	Daily Maximum
Flow - gpd	Report 1/quarter Est.	Report 1/quarter Est.
TOC	---	50 mg/L 1/quarter Grab
Oil & Grease	---	15 mg/L 1/quarter Grab
pH	6.0 - 9.0 s.u. 1/quarter Grab	

Outfall 103 – treated sanitary wastewater

Parameter	LPDES	
	Monthly Average	Weekly Average
Flow - gpd	Report 1/quarter Est.	Report 1/quarter Est.
BOD ₅	30 mg/L 1/quarter Grab	45 mg/L 1/quarter Grab
TSS	30 mg/L 1/quarter Grab	45 mg/L 1/quarter Grab
Fecal Coliform	200 col./100 mL 1/quarter Grab	400 col./100 mL 1/quarter Grab

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9. ENDANGERED SPECIES

The receiving waterbody, Subsegment 040403 of the Lake Pontchartrain Basin, has been identified by the U.S. Fish and Wildlife Service (FWS) as habitat for the West Indian Manatee, which is listed as threatened and/or endangered species. LDEQ has not submitted this draft permit to the FWS for review in accordance with a letter dated November 17, 2008, from Rieck (FWS) to Nolan (LDEQ). As set forth in the Memorandum of Understanding between the LDEQ and the FWS, and based on information provided by the FWS, LDEQ has determined that the issuance of the LPDES permit is not likely to have an adverse effect upon the West Indian Manatee. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat. Therefore, the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat.

10. HISTORIC SITES

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

11. TENTATIVE DETERMINATION

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a permit for the discharge described in the application.

12. PUBLIC NOTICES

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

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Rationale for Zen-Noh Grain Corporation

1. **Outfalls 002 and 003** – area washdown water and stormwater runoff (estimated flow for Outfall 002 – 115,000 gpd and Outfall 003 – 278,000 gpd)

Pollutant	Limitation		Reference
	Monthly Avg	Daily Max	
	mg/L		
Flow	Report	Report	
TOC	---	50	Similar discharges*, LAG480000 (BPJ)
Oil & Grease	---	15	Similar discharges*, LAG480000 (BPJ)
pH, s.u.	6.0 (min)	9.0 (max)	Similar discharges*, LAG480000 (BPJ)

Treatment: none

Monitoring Frequency: once per two months for Outfall 002 and quarterly for Outfall 003 for all parameters at the point of discharge from the various ditches; The monitoring frequency for Outfall 002 is being changed from 1/quarter to once per two months based on DMR excursions.

Limits Justification: Limits are based on the previous permit, current guidance for similar discharges from other facilities, and the Light Commercial General Permit, LAG480000 effective August 1, 2001.

2. **Outfall 103** – treated sanitary wastewater (estimated flow is 6,000 gpd)

Pollutant	Limitation		Reference
	Monthly Avg	Weekly Avg	
	mg/L		
Flow	---	Report	
BOD ₅	30	45	Similar discharges* (BPJ), LAG540000
TSS	30	45	Similar discharges* (BPJ), LAG540000
Fecal Coliform colonies/100ml	200	400 (Daily Max)	Similar discharges* (BPJ), LAG540000

Treatment: Clow sewage treatment plant with chlorination

Monitoring Frequency: quarterly for all parameters at the point of discharge from the sewage treatment plant

Limits Justification: Limits and monitoring frequencies are based on the previous permit, current guidance for similar discharges from other industrial facilities, and the Class II Sanitary Discharge General Permit, LAG540000 effective November 1, 2007.

* Existing permits for similar outfalls

BPJ Best Professional Judgement

su Standard Units

NOTE

For outfalls containing concentration limits, the usage of concentration limits is based on BPJ for similar outfalls since the flow is variable and estimated.

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STORM WATER POLLUTION PREVENTION PLAN (SWP3) REQUIREMENT

A SWP3 is not included in the permit because in accordance with LAC 33:IX.2511.A.1, storm water discharges shall not be required to obtain an LPDES permit "... except... discharges associated with industrial activity." In accordance with LAC 33:IX.2511.B.14.h, facilities classified as SIC code 4221 are not considered to have storm water discharges associated with industrial activity unless they have "vehicle maintenance shops, equipment cleaning operations, or airport deicing operations." This facility does not have vehicle maintenance shops or equipment cleaning operations. Additionally, as per LAC 33:IX.2511.B.14.a-k, storm water discharges from facilities classified as SIC code 5153 and 5099 are not considered to be associated with industrial activities. Therefore, an SWP3 is not included in the permit.